

REMARKS

Claims 1, 3-12, 14-18, 20, 21, and 23-29 are pending in this application. Claims 1, 9, 15, 18, 20, 23, and 25 are independent. Applicants have amended the claims to more particularly point out and describe the invention. No new matter was added.

The examiner uses Inoue and Kuhnel to reject claims 1, 3-8, 23 and 29 as having been obvious.

Claims 1 and 23, as amended, recite "maintaining the interruption-free communication path through the home-agent when the mobile-device moves to a second-communication-area, the maintaining comprising the mobile-device requesting a new address from a server and communicating the new address to the home-agent," or similar language. Inoue and Kuhnel do not teach or suggest at least this claim feature, whether taken separately or in combination.

Inoue merely addresses the problem of carrying out home address dependent communication processing at a visited site. More specifically, Inoue discloses:

- (a) mobile computer management device carries out exchanges with a dynamic address management server on behalf of the mobile computer so that the mobile computer which has received the dynamic address allocation at the home network can be operated at the visited site by using the mobile communication protocol.
(see Abstract)

This is very different from maintaining the interruption-free communication path through the home-agent when the mobile-device moves to a second-communication-area, the maintaining comprising the mobile-device requesting a new address from a server and communicating the new address to the home-agent, as claimed in claims 1 and 23.

Kuhnel fails to make up for this deficiency in Inoue. Kuhnel teaches an ATM switching architecture for a wireless telecommunications network that includes two separate units having different functionality. The first unit performs mobility control, wherein a virtual path which contains all virtual channels of a mobile terminal is switched from a first port associated with a first access point, to a second port connected to a first port of the second unit. The second unit performs a switching operation, wherein the virtual channels of the mobile terminal are

distributed from the first port of the second unit to different destination ports of the second unit.

More specifically, Kuhnel discloses:

the means for performing switching operations and mobility control is separated into two units with different functionality. The first unit is performing the mobility related switching (mobility control), wherein a virtual path which contains all virtual channels of a mobile terminal is switched from one port that is associated with an access point to a port that is connected to the second unit. The second unit is performing the call related switching operation (e.g. switching of permanent VCs, switching of signaled VCs), wherein the virtual channels of the input port are distributed to different destination (or target) ports in the unit. (Col. 2, lines 4-15)

Here again, this is very different from maintaining the interruption-free communication path through the home-agent when the mobile-device moves to a second-communication-area, the maintaining comprising the mobile-device requesting a new address from a server and communicating the new address to the home-agent, as claimed in claims 1 and 23. Accordingly, claims 1 and 23 are not rendered obvious by Inoue and Kuhnel.

The examiner uses IETF RFC 2344 and Kuhnel to reject claims 9-12, 14-18, 20, 21 and 25-28 as having been obvious.

Claim 9, as amended, recites "encapsulating the request-layer with a roaming-layer including a real-address of the mobile-device and a home-agent-address." RFC 2344 and Kuhnel fail to teach or suggest at least this quoted claim feature.

The examiner points applicant to section 5 (Mobile Node to Foreign Agent Delivery Styles) of IETF RFC 2344. Applicant cannot find any disclosure, suggestion or teaching of a roaming-layer including a real-address of the mobile-device and a home-agent-address and therefore the references are completely devoid of encapsulating the request-layer with a roaming-layer including a real-address of the mobile-device and a home-agent-address. More specifically, RFC 2344 discloses:

5.2.2. Packet Header Format and Fields

This section shows the format of the packet headers used by the Encapsulating Delivery style. The formats shown assume IP in IP encapsulation [2].

Packet format received by the foreign agent (Encapsulating Delivery Style):

IP fields (encapsulating header):

Source Address = mobile node's home address
Destination Address = foreign agent's address
Protocol field: 4 (IP in IP)
IP fields (original header):
Source Address = mobile node's home address
Destination Address = correspondent host's address
Upper Layer Protocol
The fields of the encapsulating IP header MUST be chosen as follows:
IP Source Address
The mobile node's home address.
IP Destination Address
The address of the agent as learned from the IP source address
of the agent's most recent registration reply.
IP Protocol Field
Default is 4 (IP in IP [2]), but other methods of encapsulation
MAY be used as negotiated at registration time.
Packet format forwarded by the foreign agent (Encapsulating Delivery
Style):
IP fields (encapsulating header):
Source Address = foreign agent's care-of address
Destination Address = home agent's address
Protocol field: 4 (IP in IP)
IP fields (original header):
Source Address = mobile node's home address
Destination Address = correspondent host's address
Upper Layer Protocol
These fields of the encapsulating IP header MUST be chosen as
follows:
IP Source Address
Copied from the Care-of Address field within the Registration
Request.
IP Destination Address
Copied from the Home Agent field within the Registration
Request.
IP Protocol Field
Default is 4 (IP in IP [2]), but other methods of encapsulation
MAY be used as negotiated at registration time. (See section 5.2.2)

This is very different from encapsulating the request-layer with a roaming-layer including a real-address of the mobile-device and a home-agent-address. Kuhnel fails to make up for this deficiency in RFC 2344. As discussed above, Kuhnel merely teaches an ATM switching architecture for a wireless telecommunications network that includes two separate units having different functionality. Accordingly, claim 9 is not rendered obvious in view of RFC 2344 and Kuhnel, whether taken separately or in combination.

For at least the same reasons, claims 15, 18, 20 and 25 are not rendered obvious in view of RFC 2344 and Kuhnelt, whether taken separately or in combination.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Applicant asks that all claims be examined in view of the amendment to the claims.

Enclosed is a \$1020 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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